JNITED STATES PATENT AND TRADEMARK OFFICE UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov JUL 1 0 5001 FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 5994 10/698,599 10/31/2003 Joakim Wigstrom 58312 (47137) 06/21/2007 **EXAMINER** EDWARDS & ANGELL, LLP NEGIN, RUSSELL SCOTT P.O. Box 9169 Boston, MA 02209 ART UNIT PAPER NUMBER

Please find below and/or attached an Office communication concerning this application or proceeding.

1631

06/21/2007

**DELIVERY MODE** 

PAPER

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
•	10/698,599	WIGSTROM ET AL.
Office Action Summary	Examiner	Art Unit
	Russell S. Negin	1631
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
Responsive to communication(s) filed on  2a) ☐ This action is FINAL.		
Disposition of Claims		
<ul> <li>4)  Claim(s) 1-161 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) is/are rejected.</li> <li>7)  Claim(s) 81-84,86 and 161 is/are objected to.</li> <li>8)  Claim(s) 1-80,85 and 87-160 are subject to restriction and/or election requirement.</li> </ul>		
Application Papers		
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some c) None of: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>		
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate

Comments

Claim 161 is objected to under 37 CFR 1.75(c) as being in improper form

because a multiple dependent claim cannot dependent from another multiple dependent

claim. See MPEP § 608.01(n). Accordingly, the claim 161 has not been further treated

on the merits.

Claim 81 is objected to because it depends from itself.

Claims 82-84 and 86 are objected to because they depend from claim 81.

Accordingly, the claims 81-84 and 86 have not been further treated on the merits.

Applicant is advised that if claims are amended or subsequently added in the

reply to this requirement, applicant must include an identification of the group that is

elected consonant with this requirement, and a listing of all claims readable thereon.

Claims 1-161 are pending in the instant Office action.

Claims 1-80, 85, and 87-160 are restricted in the instant Office action.

Species Elections

This application contains claims directed to the following patentably distinct

species. Applicant must elect a single species from each of the three categories:

Category #1: Memory (claims 35-38 and 62-64)

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Species A: the computer program product further comprises a memory, storing data relating to substrate properties. (claim 35)

Species B: the computer program product further comprises a memory, storing data relating to properties of the sensor. (claim 36-37)

Species C: the computer program product further comprises a memory, storing data relating to parameters of functions of the microfluidic substrate. (claim 38)

Species D: the computer program product further comprises a memory, storing data relating to scanning a sensor across one or more fluid streams of the microfluidic substrate and/or varying pressure at one more microchannels of the microfluidic substrate. (claim 62-64)

Justification: Each type of memory storage is based on physically distinct subject matter.

Category #2: scanning continuity (claims 6-7, 149-150)

Species E: the scanning is continuous. (claim 6)

Species F: the scanning is interrupted by one or more programmed pauses during a selected time interval. (claim 7)

Justification: Each type of scanning is based on distinct physical principles.

Category #3: region composition (claims 47 and 115)

Species G: the region comprises a channel

Species H: the region comprises a reservoir

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Species I: the region comprises a cell chamber

Justification: Each part of a region is a different physical entity.

The species are independent or distinct because claims to the different species recite the mutually exclusive characteristics of such species. In addition, these species are not obvious variants of each other based on the current record.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1-5, 8-28, 34, 39-46, 48-61, 65-80, 85, 87-100, 107-114, 116-148, and 151-160 are generic.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete <u>must</u> include (i) an election of a species to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

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The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected species.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the central PTO Fax Center. The faxing of such pages must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CFR § 1.6(d)). The Central PTO Fax Center Number is (571) 273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Negin, Ph.D., whose telephone number is (571) 272-1083. The examiner can normally be reached on Monday-Friday from 7am to 4pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Ram Shukla, Supervisory Patent Examiner, can be reached at (571) 272-0735.

Information regarding the status of the application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information on the PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**RSN** 

12 June 2007

The 4/12/07

SHUBO (JOE) ZHOU, PH.D.
PATENT EXAMINER